REMARKS

This is in response to the Office Action of May 9, 2006 (herein referred to as "Office Action"). Claims 1-13 and 16-22 are pending in this application. Claims 4-7, 9, and 16-22 have been withdrawn from consideration. Claims 1-3, 8, and 10-13 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 1 stands rejected under 35 U.S.C. 102(b) as being anticipated by Waldrop et al. Claim 1 is hereby amended to incorporate claim 11, which has no prior art rejection. Claim 11 is hereby canceled.

Claims 14-15 have been canceled without prejudice or disclaimer and only have been canceled to expedite prosecution of the pending set of claims. Applicants reserve the right to file any canceled subject matter in one or more continuing applications.

I. Claim Amendments

Independent Claim 1 has been amended to incorporate original claim 11, which has no prior art rejection. The limitation of "wherein said peptide binds to soraphen" has support in original claim 11 as filed and throughout the specification, see for example p. 2 lines 10-12.

Claim 11 has been canceled.

These claim amendments more specifically define applicants' invention. These amendments are made to narrow the issues and place the claims in better condition for allowance or appeal, and entry thereof is respectfully requested.

Applicants respectfully request reconsideration of the claims as amended herein and in view of the remarks below.

II. Claims Rejections – 35 U.S.C. § 112, Second paragraph

Claims 1-3, 8, and 10-13 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention. The Examiner states that claim 1 is confusing and that the metes and bounds are not clear because a "peptide comprises an Acetyl CoA carboxylase (ACCase) that includes biotin binding domain, and carboxy transferase domain and a functional biotin carboxylase (BC) domain. However, the claim also requires a deleted biotin binding domain, having a deleted carboxy transferase domain, and having a functional biotin carboxylase

(BC) domain." (Office Action at p. 5) The Examiner also states that claim 1 is vague in reciting having a functional biotin carboxylase (BC) domain "because it is unclear how an ACCase still comprise (i.e. having) a functional biotin carboxylase (BC) domain after having a deleted biotin binding domain and carboxy transferase domain". (Office Action at p. 5)

Claim 1 is directed to a peptide comprising an Acetyl CoA carboxylase having a deleted biotin binding domain, having a deleted carboxy transferase domain, and having a functional biotin carboxylase domain. The applicants direct the Examiner's attention to the specification p. 2 at line 12, p. 2 at lines 16-17, and p. 8 at lines 16-17 where a functional biotin carboxylase (BC) domain is described as one that is capable of binding soraphen. Applicants also direct the Examiner's attention to the specification p. 6 at lines 30-32 where deleted is described as either "total deletion of the specified segment ***or*** the deletion of a sufficient portion of the specified segment to render the segment inoperative or nonfunctional". Thus an Acetyl CoA carboxylase may comprise a functional biotin carboxylase domain, i.e. one that is capable of binding soraphen, while also having deleted biotin binding and carboxy transferase domains, e.g. domains that have been totally deleted ***or*** rendered inoperative or nonfunctional. Support for this is found throughout the specification, see for example p. 25-26 of the specification (Example 3) and Figures 3 and 4. The subject matter of the invention is therefore particularly pointed out and distinctly claimed in claims 1-3, 8, 10, and 12-13 as a peptide comprising an Acetyl CoA carboxylase having a deleted biotin binding domain, having a deleted carboxy transferase domain, and having a functional biotin carboxylase domain capable of binding soraphen.

Applicants further submit that use of the term "deleted" to specifically describe and claim an invention is common, see for example:

U.S. Patent No. 6,911,205:

> Claim 1. A stable trimer of three HIV-1 or HIV-2 soluble envelope glycoprotein monomers, wherein each monomer contains a HIV-1 gp120 protein or HIV-2 gp125 protein, referred to as the gp120 protein, wherein at least one monomer is modified, wherein the modified monomer maintains the overall three-dimensional structure of the wildtype gp120 monomer, ***wherein a portion of one variable region of the modified monomer has been deleted*** and wherein a trimeric motif has been added carboxyl to the gp120 protein.

U.S. Patent No. 6,962,708:

> Claim 1. A chimeric live, infectious, attenuated virus, comprising: a yellow fever virus in which the ***nucleotide sequence encoding a prM-E protein is either deleted,***

> ***truncated, or mutated so that functional yellow fever virus prM-E protein is not expressed***, and integrated into the genome of said yellow fever virus, a nucleotide sequence encoding a prM-E protein of a second, different flavivirus, to that said prM-E protein of said second flavivirus is expressed, wherein the capsid protein of said chimeric virus is from yellow fever virus.

U.S. Patent No. 7,022,816:

> Claim 1. A cell membrane preparation obtained from a cell that expresses an exogenous gene encoding a mammalian D2 dopamine receptor, wherein said exogenous mammalian D2 dopamine receptor-encoding gene is from a mammalian species different from the species of the cell in which the exogenous gene is expressed, and wherein said exogenous mammalian D2 dopamine receptor-encoding gene has an amino acid sequence identified as the amino acid sequence of FIG. 7A-C, FIG. 18A-H or FIG. 18A-H ***wherein amino acids 242-270 are deleted*** therefrom.

For these reasons it is submitted that the rejection under 35 USC 112, second paragraph, should be withdrawn.

III. Claims Rejections – 35 U.S.C. § 102(b)

Claim 1 stands rejected under 35 U.S.C. 102(b) as being anticipated by Waldrop et al. The Examiner states that Waldrop et al. discloses "protein crystals of biotin carboxylase...having no biotin-binding domain (i.e. deleted), having no carboxylase transferase domain (deleted)". (Office Action at p. 6)

To simplify the issue, applicants have amended claim 1 to incorporate claim 11 reciting "wherein said peptide binds to soraphen". Accordingly, applicants submit that the amended claim does not read on Waldrop et al. Applicants note that Waldrop discloses only the X-ray structure of the biotin carboxylase subunit of the acetyl-CoA carboxylase complex from *Escherichia coli*. Applicants direct the Examiner's attention to p. 26 lines 10-12 where data is provided demonstrating that the *E. coli* biotin carboxylase (BC) **does not** exhibit soraphen binding and **is not** inhibited by soraphen.

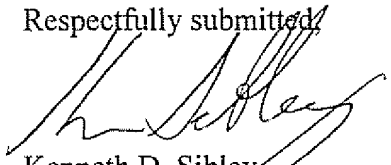
Applicants further submit that, as stated in the Waldrop et al. reference, in *E. coli* "acetyl-CoA carboxylase is composed of three subunits that are isolated separately and that display distinct functional properties" and that "[i]n contrast to the bacterial enzyme, animal acetyl-CoA carboxylases have molecular weights of approximately 225 000 and contain all three functions on a single polypeptide chain." (Waldrop et al. p 10249) The polypeptide disclosed in Waldrop et

al. **does not** naturally contain a biotin-binding domain or carboxylase transferase domain. This is in contrast to the polypeptide of the present invention that would naturally contain a biotin carboxylase domain, a biotin-binding domain, and a carboxylase transferase domain. The present invention is directed to a polypeptide wherein the biotin-binding domain and carboxylase transferase domain have been deleted. For this reason and in view of the amendments submitted herein it is submitted that the rejection under 35 USC 102(b) should be withdrawn.

CONCLUSION

In view of the remarks presented herein, Applicants respectfully submit that this application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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